

oilweek

1983 GUIDE TO DRILLING FLUIDS

Supplement to December 6th 1982 issue of Oilweek.

oilweek

We're everywhere you want us to be.

Calgary, Alberta
 High Level, Alberta
 Lacombe, Alberta
 Lloydminster, Alberta
 Omeroy, Alberta
 Prince River, Alberta
 Rocky Mountain House, Alberta
 Slave Lake, Alberta
 Wainwright, Alberta
 Wainwright, Alberta
 Fort Nelson, British Columbia
 Fort St. John, British Columbia
 Vancouver, British Columbia
 Westport, New Brunswick
 St. John's, Newfoundland
 Chathamville, Nova Scotia
 Inuvik
 Northwest Territories
 North Bay, Ontario
 Sudbury, Ontario

BARCLAYS CANADA INC. SUITE 100, 500

702-A W. GERRARD ST. E. TORONTO, ONT. M4M 1B7

N Baroid

PROTEC
MUD SERVICE LTD.

PROUDLY SERVICING
THE
CANADIAN OIL INDUSTRY

- DRILLING FLUIDS
- CORROSION SERVICES
- WORKOVER AND COMPLETION FLUIDS
- TRAINING AND LAB FACILITIES

301, 602 - 11th Avenue S.W., Calgary, Alberta T2R 1J8 Ph. 266-7383

HYDROGEL[®]




Wyo-Ben[®]
Inc.

Wyo-Ben, Inc. has been mining, processing and marketing drilling muds under the HYDROGEL[®] name for 30 years. It is your assurance of consistent and superior quality.

Our warehouse network stocks HYDROGEL[®] and a complete line of drilling fluid additives.

Available at 20 Wyo-Ben locations throughout Alberta and British Columbia through all mud engineering firms.

P.O. Box 1979
Billings, MT 59103



National Mud Control *Laboratories*

St. John's, Nfld. (709) 753-9441 Telex 016-47002	Calgary, Alta. (403) 237-0346 Telex 03-827719	Dartmouth, N.S. (902) 469-7793 Telex 019-31431
--	---	--

Onland or Offshore

Canadian Oilmen call on National Mud for the "Tough" Jobs

We provide the drilling fluid and we also provide the experience, the planning, the detailed "know how," needed to put it to work effectively. The National Mud Team are "Professionals" trained to get the job done.

In the Laboratory too, our skilled technicians are always available to find quick answers to tricky problems

- Complete drilling mud and laboratory services throughout Canada
- Helicopter service Grand Cache — Grande Prairie
- Cessna — Ft. St. John — Ft. Nelson
- Laboratory analysis services
- Drilling engineering consultants land and offshore
- Computer hydraulics — pressure plots
- Workover specialists
- Inhibited drilling systems

Suite 200, 320 - 23 Ave. S.W. Calgary, Alberta T2S 0J2

PRODUCT TRADE NAMES	PRODUCT DESCRIPTION (Generic, Chemical or Other)	OTHER FUNCTIONS (Refer to Color and Indicated Group Number "P" Indicates Primary Function)	SYSTEMS USED IN		DISTRIBUTED IN CANADA BY
			WATER BASE	FRAM BASE	
			<input type="checkbox"/> UNCOATED <input type="checkbox"/> COATED <input type="checkbox"/> INHIBITED <input type="checkbox"/> BURNISH <input type="checkbox"/> POLYMER	<input type="checkbox"/> FRAM <input type="checkbox"/> POLYMER	

ALKALINITY pH CONTROL		GROUP 1						
BARABUF	Magnesium oxide pH stabilizer				*	*		BARO-D
PICCOLANO OF SODA	NH ₄ CO ₃							ALL
CAUSTIC POTASH	KOH							MOST
CAUSTIC SODA	NaOH							ALL
LIME	Hydrated lime							MOST
PH-10	Sulfur system magnesium oxide							BRINADO
QUICK LIME	Calcium oxide							WYO-BEN

[illegible]

		GROUP 3									
BARIUM CARBONATE	BaCO ₃						**	**	**	**	ALL
BICARBONATE OF SODA	NaHCO ₃	1					**	**	**	**	ALL
GEL 12	Cellulose acetate polymer						**	**	**	**	AMERICAN COLLOID/ANMARK
SODA ASH	Sodium carbonate	1					**	**	**	**	ALL

CORROSION INHIBITORS		GROUP 4				
AMMONIUM BISULFITE	Oxygen scavenger		*	*	*	1 D F
AQUA-TEC	Na ₂ O soluble amine					MILCHEM
AMI-TEC	Oil soluble amine compound				*	MILCHEM
BZQ	Basic zinc carbonate		*	*	*	CANAMARPA SUPPLY
BRINE GUARD	Na ₂ S scavenger zinc carbonate		*	*	*	BRINAQD
BROOKS #1	For solids — lime trash water or brine systems		*	*	*	BARQD
BRINE-CT	Crystallized O ₂ scavenger		*	*	*	BRQD
BRINE-PAC	For solids — free packer fluid		*	*	*	MILCHEM
CHEMHS #3	Corrosion inhibitor, anti anodic biocorrosion		*	*	*	BRINAQD
ClE	Amine compounds and oxygen scavenger		*	*	*	SUPERIOR MUD SALS
C-LUX	Liquid sodium sulphate catalyst		*	*	*	UNITED MUD
COAT-43	Sulphate scavenger		*	*	*	BARQD
COAT-45	Morganite zinc salt for sulphate scavenging		*	*	*	BARQD
COAT-110	Atmospheric corrosion inhibitor					BARQD
COAT-129	Oxygen scavenger & scale inhibitor		*	*	*	BARQD
COAT-145	Film forming amine		*	*	*	BARQD
COAT-177	Liquid oxygen scavenger		*	*	*	BARQD
COAT-668	Oxygen scavenger		*	*	*	BARQD
COAT-B1400	Film forming amine salt		*	*	*	BARQD
COAT-C1815	Film forming amine		*	*	*	BARQD

CORROSION INHIBITOR	Zinc dye and sodium dichromate							WGT-BEN MOST
DRILL AND LUBE OILS	SOLUBLE							
I.D.F. SCALE INHIBITORS	Phosphotungstic scale inhibitor							I.D.F.
IMCO SLURX-II	Dialkyl zinc compounds							IMCO SERVICES
IMCO S-60A	Multipurpose corrosion inhibitor							IMCO SERVICES
IMCO 90	Epoxy scavenger							IMCO SERVICES
IMCO SCFPM II	Zinc compound							IMCO SERVICES
IRONITE SPONGE	H ₂ S scavenger and oxygen scavenger							ALL
MAGCO INHIBITOR 151	Amine type inhibitor							MAGCORR
MAGCO INHIBITOR 202	Amine inhibitor							MAGCORR
MAGCO INHIBITOR 310	Amine type inhibitor							MAGCORR
MIL-GARD	H ₂ S scavenger - nic carbamate							MILCHEM
MILGARD R	Dialkyl zinc isopropionate							MILCHEM
MUD-PAC	Corrosion inhibitor for limestone gasifier fluids							MILCHEM MILCHEM
NADAGEN	Catalytic sodium sulphide powder							
NOXYGEN L	Liquid oxygen scavenger - ammonium bisulfite							MILCHEM
OBI-I	Scavenger sodium sulfhydryls							MAGCORR
OBI-L	Ammonium bisulfite catalyst							MAGCORR
OSTEK	70% Ammonium bisulfite							SUPERIOR MUD SALES
PRO-FILM	Film forming amine						*	PHOTEC MUD
PERMA-FILM	Film forming corrosion inhibitor							IMCO SERVICES
RUC-CALC								

PRODUCT TRADE NAMES	PRODUCT DESCRIPTION (Generic, Chemical or Other)	OTHER FUNCTIONS (Refer to Color and Indicated Group Number "P" Indicates Primary Function)	SYSTEMS USED IN		DISTRIBUTED IN CANADA BY
			WATER BASE	NONWATER-BASE	
			BLACK BRACKEN CHL BASE MAG AIR CAL MITT		

EMULSIFIERS		GROUP 6										
ATYALDEE	Oxyethylene vinyl phenol liquid											BARCO
ASPIA MUL	Basic emulsifier											WYO BEN
ATILCO	Emulsifier for oil in fresh or salt water											MILCHEM
ATILCOSSC	Emulsifier for oil in brine solutions											MILCHEM
BRONCMUL	Basic emulsifier											BRONCO
CARBO-MUL	Oil mud emulsifier and oil wetting agent											MILCHEM
CARBO-TEC	Oil mud high temperature emulsifier											MILCHEM
DAKULITE	Lignite											MOST
DRILL FAZE	Oil based mud											MILCOBAR
DRILLTREAT	Oil mud stabilizer											BARCO
DV-33	Oil wetting agent for oil muds											MILCOBAR
EMULCO	Chalk emulsifier											BRINADO
EMULGIZER T15	Oil-solvent emulsifier											I.D.F.
EW-33	Emulsifier											WYO BEN
FZ MUL	Oil soluble surfactant liquid											BARCO
IMCO KENOL CONC	Blended emulsifier & gelling agent											IMCO SERVICES
IMCO MD	Detergent											IMCO SERVICES
IMCO MUD OIL	Asphaltic solids in diesel											IMCO SERVICES
IMCO CWS	Asphaltic solids in water											IMCO SERVICES
INVE-SMUL	Oil mud stabilizer											BARCO
MAGCONATE	Phenolium sulfonate emulsifier											MAGCOBAR
OIL FAZE	Oil base mud											MILCOBAR
OIL-W-WATER	Emulsifier											UNITED MLO
OILSPERSE	Organic emulsifier											BRINADO
OWC-40	Dispersible clay											WYO BEN
PELTEX	Lignosulfonate											MOST
POLY MUL	Oil-water emulsifier											I.D.F.
RAYVAN	Diethylene glycolphosphate											MOST
SALINEX	Chemical emulsifier											MAGCOBAR
SUPER LIG	Lignite											INDEPENDENT MUD SERVICES
SUPER TREAT	Clastic Inhibitor											INDEPENDENT MUD SERVICES
SUPER-X	Nonionic emulsifier											MILCOBAR
SURF-COTE	Secondary oil wetting agent											MILCHEM
TRIMULSO	Oil-in-water emulsifier											BARCO
VERTOL	Invert base											MILCOBAR
VIZ-THIN	Lignosulfonate											INDEPENDENT MUD SERVICES

FILT RATE REDUCERS		GROUP 7						
AESTARCH	Pregelatinized starch				*	*	*	* ACE MUD SERVICE
AM-21	Nontacky polymeric fluid				*	*	*	I.O.F.
BARIO ASPHALT	Dressed asphalt				*	*	*	* BARIO
BARRIER	Fluid loss control				*	*	*	CANAMARA SUPPLY
KRIDGE SALT	Polymer, calcium lignosulfonate, salt				*	*	*	SUNRISE MUD SERVICES
BRIGAL	Polymer & fused carbonates				*	*	*	* BRINADO
CARGO-TROL	Oil filtration control agent				*	*	*	MILCHEM
CELLEX	Sodium carboxymethyl cellulose				*	*	*	* BARIO
CEL PAK	Anionic cellulose polymer				*	*	*	* IMMO SERVICES
OFS & 8 DRILLING FLUID	Polymer based, acid soluble, non-damaging fluid system				*	*	*	* CANADIAN FLUID SYSTEMS
CHEM-TROL X	Polymer blend for salt calcium and high temperature corrosion inhibitor problems				*	*	*	MILCHEM
CMC	Carboxymethylcellulose				*	*	*	* ALL
CYBAN	Sodium polystyrylate				*	*	*	* MOST
DEXTRID	Partially deionized polysaccharide				*	*	*	* BARIO
DRLC AID 425	Sodium polystyrylate				*	*	*	* MOST
DRUGLOSS	Sodium dextran methyl cellulose				*	*	*	* MOST
DRISPAK	Polypenic cellulose				*	*	*	* MOST
DRISPAK SUPER LOW	Polysulfonic cellulose				*	*	*	* MOST
DURATONE	Tungsten sulfonate colloidal powder				*	*	*	* BARIO
EUTEREX	Temperable stable lignite powder				*	*	*	* MILCHEM
FV F2	Flue gas control system for oil muds				*	*	*	* MACROBAR
FL 3	Water sensitive hydro coloids				*	*	*	* BRINADO
FL 4	Water sensitive hydro coloids				*	*	*	* BRINADO
FLITEX	Lignosulfonates, carboxylates, carbonates				*	*	*	* SUPERIOR MUD SALES
FLK-110	Polymic fluid loss reducer				*	*	*	* I.O.F.
HOT-HIP	High temperature fluid loss reducer				*	*	*	* I.O.F.
IDOLF	Non-viscifying fluid loss reducer				*	*	*	* I.O.F.
IMA	Salt mud blend				*	*	*	* WFO-BEN
IMMO LOG	Pregelatinized corn starch				*	*	*	* IMMO SERVICES
IMMO PHENOLIC	Organic polymer				*	*	*	* IMMO SERVICES
IMMO POLYSATE	Multipurpose polymer				*	*	*	* IMMO SERVICES
IMMO VR	Aliphatic resin				*	*	*	* IMMO SERVICES
INTERMEK	Pregelatinized starch				*	*	*	* BARIO
J-LIFE	Potassium lignite derivative				*	*	*	* BARIO
LUGOD	Lignite				*	*	*	* MILCHEM
LUGOD	Quasimull lumps				*	*	*	* MILCHEM

PRODUCT TRADE NAMES	PRODUCT DESCRIPTION (Generic, Chemical or Other)	OTHER FUNCTIONS (Refer to Color and Indicated Column Number P Indicates Primary Function)	SYSTEMS USED IN					
			WATER BASE					
			NON-SOLUBLE	SOLUBLE	EMULSION	HYBRID	COLORLESS M/G	AIR CURE M/U/T

LOST CIRCULATION MATERIAL		GROUP 10													
ACL SEAL	Coal-based fibre flake; granules														ACL MUD SERVICE
CANE FIBRE	Shredded cane														ALL
CARBON SEAL	Dry mud, modified hydrocarbon													*	MILCHEM
CEALCAL	Ace soluble sealer L.C.M. for polymer system													*	MACROSEAL
CEASTOP	Ace soluble L.C.M.													*	MILCHEM
CECAR FIBRE	Shredded cedar													*	MOIST
CELLULOSE	Cellulose flake													*	ALL
CROCHETS	Sured carbonates													*	SUPERIOR MUD SALES
CROCHETS MAX	Sured carbonates													*	SUPERIOR MUD SALES
COTTONED HULLS	Cottonseed hulls													*	WOODEN
CRACK L	Crackdown earth													*	WOODEN
DIASEAL M	Blended lost circulation additive													*	IMCO SERVICES
DICK'S MUD SEAL	Shredded organic material													*	MOIST
EMULGO PILL	Chalk emulsifier with calcium carbonates													*	BRINAID
FIRESTOP	Processed cane fibres													*	BRINAID
FTXTR	Lignophosphates, polymers, carbonates													*	SUPERIOR MUD SALES
IMCO FLAKES	Cellulose flake													*	IMCO SERVICES
IMCO FIBER	Fibre blend													*	IMCO SERVICES
IMCO MICA	Mineral mica													*	IMCO SERVICES
IMCO PLUG	Crushed walnut hulls													*	IMCO SERVICES
IMCO WOOL	Thermus mineral wool													*	IMCO SERVICES
INDE PLUG	Hammered silyolam													*	MOIST
INTERLOK	All purpose L.C.M.													*	I.O.F.
ISO-PLUG	Blend of silicates, fluid loss additives & bridging agents													*	BRINAID PRODUCTS
KINK SEAL	Combination L.C.M.													*	MOIST
LINTEX	Fibers, cellulose													*	BARROD
MICA	Sized mica flake													*	MOIST
MICATEX	Mica flakes													*	BARROD
MIL-CECAR PLUG	Shredded cedar fibres													*	MILCHEM
MIL-FIBER	Processed cane fibres													*	MILCHEM
MILLEKLE	Shredded cellulosic flakes													*	MILCHEM
MILMICA	Nonabrasive mica flakes													*	MILCHEM
MIL-PLUG	Crushed walnut hulls													*	MILCHEM
NUT PLUG	Crushed walnut hulls													*	MILCHEM
O.S.S. PILL	Oil soluble cement polymer system													*	BRINAID
PAPER-OK	Shredded paper													*	MILCHEM
PETRO SEAL	Various sized paper products													*	ACE MUD SERVICE
PLUG-GIT	Unicured barbed fibre													*	BRINAID
PULL BRIDGE	Polymers and anionic electrical system													*	MILCHEM
POLY SEAL	Polymers flake													*	MOIST
PRO FIBER	Shredded excelsior mat													*	WYDEN
REFI FARRI	Sized calcium carbonate													*	REMY MUD
RUP-PLUG	Blend of cement dust													*	WYO-BER
SANDHILL PILL	Calcium carbonate polymer system													*	BRINAID
SAWUST	Saw-dust													*	ALL
SIMPLE SEAL	Calcium carbonate polymer system													*	BRINAID
SILUGIT	Sized calcium carbonates													*	BRINAID
SOLUBILES	Sized oil soluble resins													*	BRINAID
SOLUBILES	Oil soluble resins													*	BRINAID
SOLVADRIK PILL	Chalk emulsifier with calcium carbonates													*	BRINAID
T-Z PILL	Reactive polymer													*	BRINAID
WALNUT HULLS	Crushed walnut hulls													*	ALL
W.D. 30	Ace soluble sunder calcium carbonate													*	MILCHEM
W.D. 50	Polymer and dyed sunder calcium carbonate													*	MILCHEM

LUBRICANTS		GROUP 11					
AXMOL	Anionic and nonionic detergent blend						MOST
AQUASPEC	Weighted spotting fluid						MILCHEM
A-23	Nonionic spotting lubricant						WFO-BEN
B-FREE HEAVY WAT	Spotting fluid for stock pipe with viscosifier						I.O.F.
BIT LUBE	E.P. lubricant						MAGCOBAR
DOS-3	Diesel oil substitute						MAGCOBAR
DRILL LAD 405	Synthetic oil						MOST
DRILL-9	Torque reducing agent						WFO-BEN
E-2 SPT	Oil mud concentrate						BAROID
GRAPHITE	Graphite						MOST
IMCO EP LUBE	Sulfonated tail oil						IMCO SERVICES
IMCO FILREPE	Anionic surface active agents						IMCO SERVICES
IMCO LUBRI KLEEN	Branded lubricants, petroleum						IMCO SERVICES
KUM FREE	Sulfonated to free pipe						UMETO MID
LUBE 106	Organic liquid compounds						IMCO SERVICES
LUBE KOTE	Graphite						MAGCOBAR
LUBEXT	Oils and surfactants						SUPERIOR MUDS SALES
LUBRA-BEADS	Plastic sphere lubricant						BAROID
LUBRELUBE	Thermoplastic polyethylene						I.O.F.
LUBRI-FILM	E.P. lubricant						MILCHEM
LUBRI-SAL	Nonpolluting lubricant						MILCHEM
MAGCOLUBE	Biodegradable lubricant						MAGCOBAR

PRODUCT TRADE NAMES	PRODUCT DESCRIPTION (Generic, Chemical or Other)	OTHER FUNCTIONS (Refer to Color and Indicated Group Number) P Indicates Primary Function	SYSTEMS USED IN						DISTRIBUTED IN CANADA BY
			WATER BASE						
			APPROVED	FRESH WATER	INHERENT	BLENDED	DIL BULK WFO		

TIMBERS - DISPERSALES		GROUP 14			
DESSO	Organic thioether			***	MOST
FERRAL CAL	Iron complexed lignosulfonate			***	MILCHEM
IBT-DIN	Lignosulfonate dispersant			***	IT-DEM
IMCO KEN CAL	Oil wetting agent		11	***	IMCO SERVICES
IMCO LIG	Processed lignite	10	11	***	IMCO SERVICES
IMCO PROS	Sodium trimetaphosphate			***	IMCO SERVICES
IMCO DRT	Diquaternary			***	IMCO SERVICES
IMCO RD-31	Branched hydrolyzable	10	11	***	IMCO SERVICES
IMCO RD 2000	Chromated lignosulfonates	10	11	***	IMCO SERVICES
IMCO THIN	Causticized lignite	10	11	***	IMCO SERVICES
IMCO TCTO	Ferrioxime lignosulfonate	10	11	***	IMCO SERVICES
LIGNITE	Lignite	10	11	***	ALL
LIGNITE, CAUSTICIZED	Lignite, causticized	10	11	***	ALL
MAGGO CAL	Chrome lignosulfonate			***	MAGGOSAR
MAGGOSOLS	Sodium trimetaphosphate			***	MAGGOSAR
MIL-FLO	Polymerized compound			***	MILCHEM
MIL-GUERSACHO	Pure Overbachs extract			***	MILCHEM
MILTEMP	Polymeric carbonaceous for elevated temperatures			***	MILCHEM
ODSOS	Sodium trimetaphosphate			***	MILCHEM
OMC	Dispersant for anisotropic clays			***	ALL
OOT	Causticized lignite			***	ACE WILD SERVICE
PELTEX	Ferrioxime lignosulfonate	10	11	***	MOST
OB II	Chrome lignosulfonate	10	11	***	BAROID
O-BROWN	Ferrioxime lignosulfonate			***	BAROID
OVERBACHO	Overbachs tannin extract			***	MOST
PATJULI	Chrome lignosulfonate			***	MOST
SAPP	Sodium acid pyrophosphate			***	ALL
SPERSENE	Chrome lignosulfonate			***	MAGGOSAR
SUPER LIG	Lignite			***	CANAMATA
TANN I & THIN	Lignite			***	MAGGOSAR
UNI-CAL	Chrome lignosulfonate			***	MILCHEM
XBE-THIN	Dispersicant for potassium muds			***	MILCHEM
XP-20	Chrome lignite			***	MAGGOSAR

WCC2023 PHS		GROUP 15					
AP-78	Polymeric viscosifier			*	*	*	* APER-MUD
ACE-BEN	Sodium polybenzylate			*	*	*	* ACE-MUD SERVICE
AQUAGEL	Sodium type superabsorbent			*	*	*	* BAROD
AQADRI	Stabilized H ₂ O and sand carbonates			*	*	*	* BRINADO
ATTAPUGIT	Clay viscosifier for salt water systems			*	*	*	* MOST
BABARUS	Pure hydroxyethyl cellulose			*	*	*	* CARJALCO
BABAZAN	High molecular wt polyanthracene			*	*	*	* BAROD
BILKAT	Organic, barosolvent and clay extender			*	*	*	* MOST
BEF	Weakly acidic carboxylic stabilized H ₂ O			*	*	*	* BRINADO
BONOCO GEL	Sodium Montmorillonite			*	*	*	* BRINACO
CAN AM GEL	Weighting bentonite			*	*	*	* MILEOM
CARBO-GEL	Oil mud suspending agent, viscosifier			*	*	*	* WYVO BEN
CHAMMER 29	Polymers			*	*	*	* I.O.F.
CE-VIS	Organic viscosifier			*	*	*	* FLOW FLUID PRODUCTS
DRL-FUL #1	Herc polymer based non rheopropag fluid			*	*	*	* SUPERIOR MUD SALES
DILLITEX	Polymer and liquid carbonates			*	*	*	* MACGOWAN
DOVUS	EC polymers			*	*	*	* I.O.F.
DY-88	Bentonite extender			*	*	*	* IMCO SERVICES
EUROGEL	High temp. magnesium silicate clay			*	*	*	* I.O.F.
IDF-EX	High yield bentonite extender			*	*	*	* MOST
FLOSAL	Shredded asbestos			*	*	*	* BAROD
GILTONE	Mud gel setting agent			*	*	*	* MARGOCARB
GOSOL	Capillary clay			*	*	*	* REEF-MUD
HIGH-YIELD	High yield bentonite			*	*	*	* WYO-BEN
HYDROGEL	Wyoming bentonite			*	*	*	* WYO-BEN
HYDRO-VIS	Polyacrylamide viscosifier			*	*	*	* IMCO SERVICES
IMCO-BEST	Calcium magnesium sulfate films			*	*	*	* IMCO SERVICES
IMCO-BRINTGL	Attapulgite clay			*	*	*	* IMCO SERVICES
IMCO-GEL	Sodium montmorillonite			*	*	*	* IMCO SERVICES
IMCO-DELEX	Sodium pyrralyrate			*	*	*	* IMCO SERVICES
IMCO-HVB	Extended Bentonite			*	*	*	* IMCO SERVICES
IMCO-PH-GEL	Colloidal clay			*	*	*	* IMCO SERVICES
IMCO-KLAY	Calcium montmorillonite			*	*	*	* IMCO SERVICES
IMCO-XC	Xanthan gum			*	*	*	* IMCO SERVICES
INDO-GEL	Wyoming bentonite			*	*	*	* INDEPENDENT MUD SERVICE
KARI	Stabilized H ₂ O			*	*	*	* BRINADO
KELZAN AL	Crystalline linked EC			*	*	*	* MOST
KELZAN XC	Carboxymethyl hypophymer			*	*	*	* MIST
KIM-MUD	Polymer and sized carbonate			*	*	*	* BRINADO
KWK THIX	Hybrid bentonite			*	*	*	* MACGOWAN
KWK VIS	Acrylic			*	*	*	* WYO-BEN
LIGUVATE	Dissolved liquid HEC			*	*	*	* BAROD
MAGGOCER	Wyoming bentonite			*	*	*	* MAGGOCARB

[illegible]

2:35 a.m.
Rough weather.
Tough zone.

In Canada, the mud has to be right. With a Milchem mud hand on the job, you won't have to worry. He'll be there when you need him with the right products for your well. Anytime. Any weather.

 *drilling fluids for service*
Milchem

#102,309 Second Ave., SW
Calgary, Alberta, Canada
Tel 403-269-6971

Rac'd.

GROUP 8		GROUP 9						
ACID FOAM	Anionic surfactant							• REEF MUD
AIR FOAM	Anionic surfactant							• WYO-BEN
AMPLFOAM	Biodegradable cationic surfactant							• MLCHEM
BRUNFOAM	Anionic foaming agent							• BINADOL
DREFOAM	Foaming agent for water							• BARQO
GL-APR	Anionic foaming agent							• MLCHEM
I.O.F. HF-FOAM	Foaming agent							• I.O.F.
IMFO FOAMANT	Biodegradable surfactant							• IMFO SERVICES
QUIK FOAM	Anionic foaming agent							• MAROD
RAPID FOAM	Foaming agent							• MACGONAR
WYO-FOAMER	Foaming Agent							• WYO-BEN

		GROUP 14					
ACE TAN	Lignosulfonate	6	7	8	9	10	AGE MUD SERVICE
CE-CLUM LIGNOSULPHONATE	Chromic lignosulfonate	6	7	8	9	10	WYBLEN
CARBONER	Lignitic lignosulfonate	6	7	8	9	10	RAICHO
CC-16	Solubilized sodium salt of lignitic lignosulfonate	6	7	8	9	10	BARCO
CF UNICAL	Chromic lignosulfonate	6	7	8	9	10	MILCHEM
CHROME X	Chromic lignite	6	7	8	9	10	MAGSABOR
DAKOLITE	Organic thioether	6	7	8	9	10	REEF MUD

WEIGHTING MATERIAL		GROUP 16						
BALCANAS	Sound limestone CaCO ₃	19	*	*	*	*	*	*BARGO
BARITE	Processed barites (BaSO ₄)		*	*	*	*	*	*MOST
BARIUM CARBONATE	Barium carbonate		*	*	*	*	*	*CANAMARRA SUPPLY
BARIO	Barite, Barium sulphate (BaSO ₄)		*	*	*	*	*	*ALL
CALCI O.F.	Sand CaSiO ₃							*I.O.P
CALCIUM CARBONATE	Calcium Carbonate	30	*	*	*	*	*	*ALL
CALCIUM CHLORIDE	Calcium chloride	1	*	*	*	*	*	*MOST
CAWKEITE	Calcium carbonate		*	*	*	*	*	*BRIMADO
FERRINATE	Ferric ferri Silicate		*	*	*	*	*	*BRIMADO
GALENA	Lead sulphide powder		*	*	*	*	*	*MOST
M-WATE FLUID SYSTEMS	Polymer, brine and CaCO ₃ , based acid	4	*	*	*	*	*	*CANADIAN FLUID SYSTEMS
IMO BAR	IMO BAR		*	*	*	*	*	*IMO SERVICES
IMO BAR PLUS	Blended Barite & Nematite		*	*	*	*	*	*IMO SERVICES
IMO NIDENGE	Epidote mudstone		*	*	*	*	*	*IMO SERVICES
IMO WATER	Calcium carbonate		*	*	*	*	*	*IMO SERVICES
LO WATE	Acid soluble weight material		*	*	*	*	*	*MACGOBAR
MAGCOBAR	Barium sulphate		*	*	*	*	*	*MAGCOBAR
MIL-BAR	Barite		*	*	*	*	*	*MILCHEM
REF. GARS	Calcium carbonate		*	*	*	*	*	*REED MUD
NAL-T	NaCl		*	*	*	*	*	*ALL
SUPER WATE	High density weight mat. for blowout control		*	*	*	*	*	*MAGCOBAR
WEIGHTER	Solid CaCO ₃		*	*	*	*	*	*SUPERIOR MUD SALES
WEIGHT AL	Sand salt		*	*	*	*	*	*SUPERIOR MUD SALES
W.O .30	Calcium carbonate	2/10	*	*	*	*	*	*MILCHEM
W.O .35	Ferrous carbonate		*	*	*	*	*	*MILCHEM

Service

Is a superior oil-mud line

KENOL oil-mud systems are setting a fast drilling performance pace where severe well-bore problems are encountered. Literally 100's of wells worldwide have been drilled with KENOL SYSTEMS under careful supervision of IMCO's service people. KENOL consists of three oil-mud systems for a variety of drilling applications and a newly-formulated KENOL-ES system for environmentally sensitive areas.

A Division of Halliburton Services, Ltd.
1100 50th Sixth Ave. S.W.
Calgary, T2P 0S2
(403) 269-4141

FROM THE "WELL-KNOWING HANDS OF IMCO"